KRUPSKIY, M.K. [Krups'kyi, M.K.] (Khar'kov)

To make the soil give a generous yield. Nauka i zhyttia 11 no.7:30-31 Jl '61. (MIRA 14:8)

1. Direktor Ukrainskogo nauchno-issledovatel'skogo instituta pochvovedeniya, chlen-korrespondent Ukrainskoy akademii sel'skokhozyaystvennykh nauk.
(Ukraine--Soil research)
(Ukraine--Irrigation)

VLASYUK, Petr Antipovich, akademik, zasl. deyatel' nauki USSR;
KRUPSKIY, M.K.[Krups'kyi, M.K.], prof., otv. red.;
MASLOBOYSHCHIKOVA, O.S.[Masloboishchykova, O.S.], red.;
POTOTSKAYA, L.A.[Pototsʹka, L.A.], tekhn. red.

[Manganese nutrition and fertilization of plants]Margantseve zhyvlennia i udobrennia roslyn. Kyiv, Vyd-vo Ukrains'koi Akad. sil'skohospodars'kykh nauk, 1962. 420 p. (MIRA 15:11)

1. Chlen-korrespondent Ukrainskoy akademii sel'skokhozyaystvennykh nauk (for Krupskiy).
(Plants, Effect of manganese on)

KRUPSKIY, N.

Accuracy. Voen. Znan. 41 no.5:17 My '65. (MIRA 18:5)

KRYLOV, A.V.;KRUPSKIY, N.I.

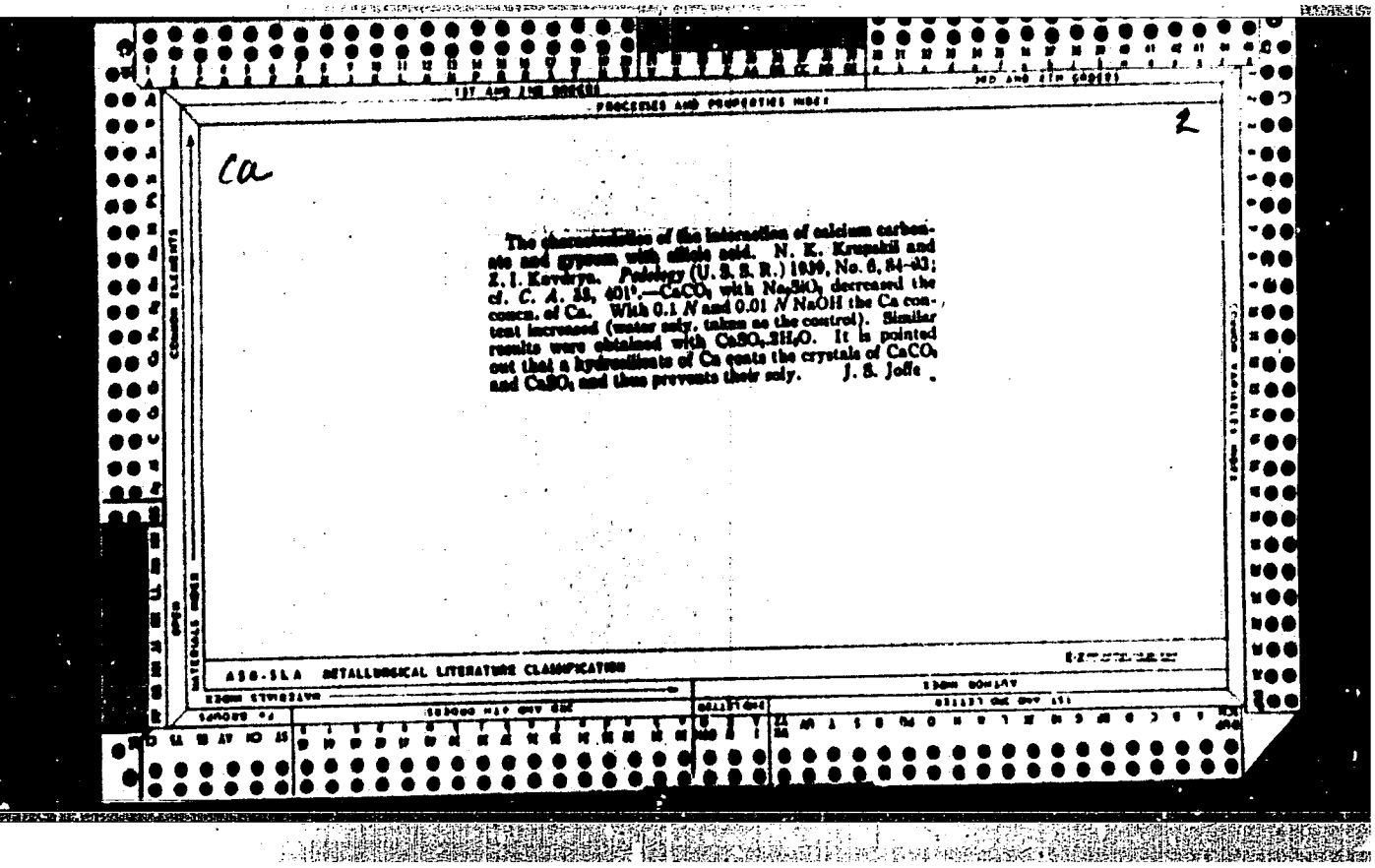
Dynamometer for determining the strength and stretch of a moving thread. Tekst.prom. 15 no.11:38-39 N '55. (MLRA 9:1)

(Thread--Testing) (Dynamometer)

KRUPSKIY, M.I.

A starter-stopper for automatic looms. Tekst.prom. 15 no.12:36-37 D '55. (MLRA 9:3)

(Looms)



ca

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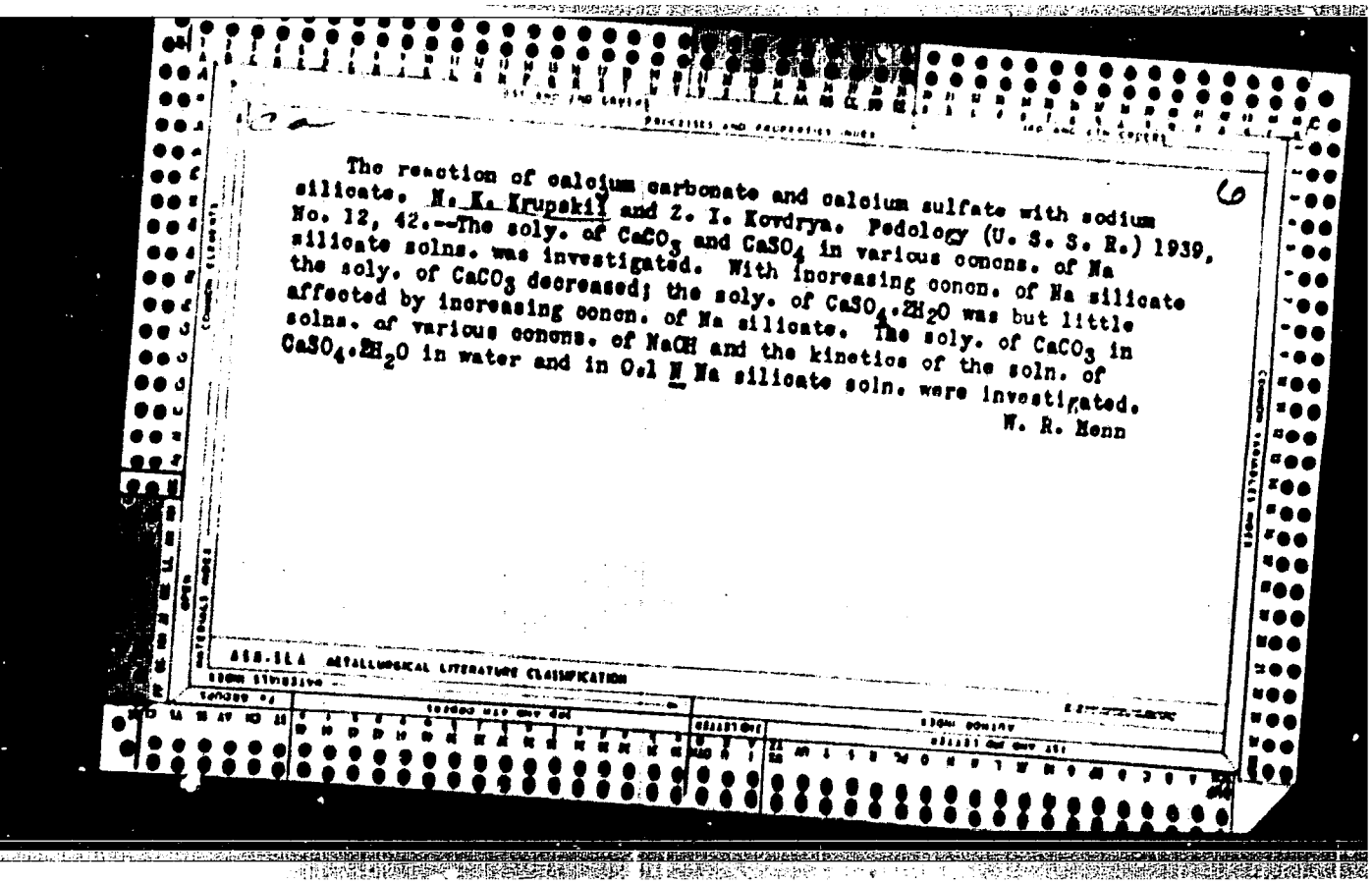
The characteristics of the interaction of calcium carbonate and gypsum with silicic acid. N. K. Krupskii and Z. I. Kovarya. *Pedology* (U. S. S. R.) 1939, No. 6, 84–93; cf. *C. A.* 33, 4015.—$CaCO_3$ with Na_2SiO_3 decreased the concn. of Ca. With 0.1 *N* and 0.01 *N* NaOH the Ca content increased (water only, taken as the control). Similar results were obtained with $CaSO_4.2H_2O$. It is pointed out that a hydrosilicate of Ca coats the crystals of $CaCO_3$ and $CaSO_4$ and thus prevents their solv. J. S. Joffe

A50-SLA METALLURGICAL LITERATURE CLASSIFICATION



The reaction of calcium carbonate and calcium sulfate with sodium silicate. M. K. Krupskiĭ and Z. I. Kovdrya. Pedology (U. S. S. R.) 1939, No. 12, 42.--The soly. of $CaCO_3$ and $CaSO_4$ in various concns. of Na silicate solns. was investigated. With increasing concn. of Na silicate the soly. of $CaCO_3$ decreased; the soly. of $CaSO_4 \cdot 2H_2O$ was but little affected by increasing concn. of Na silicate. The soly. of $CaCO_3$ in solns. of various concns. of NaOH and the kinetics of the soln. of $CaSO_4 \cdot 2H_2O$ in water and in 0.1 N Na silicate soln. were investigated.

W. R. Henn

6

[redacted], S. A., [redacted]; [redacted].

Soil Mechanics

Experience in alkalinization of soils as a measure against filtration from water reservoirs. Gidr. i mel. 5, No. 2, 1953.

Monthly List of Russian Accessions, Library of Congress
June 1953. UNCL.

GRIN', O.S.; KRUPSKIY, N.K., kandidat sel'skokhoziaystvennykh nauk; KISEL', V.D. SOKOLOVSKIY, A.N., redaktor; GRINCHENKO, A.M., kandidat sel'skokhozyaystvennykh nauk, redaktor;SHIKAN, V.L., redaktor; SIVACHENKO, Ye.K., tekhnicheskiy redaktor.

[Soil characteristics of the Negaysk Massif in the Ukraine from the point of view of agrigultural land improvement] Agromeliorativnaia kharakteristika pochv Negaiskogo massiva Ukrainy. Kiev, Izd-vo Akademii nauk USSR, 1955. 68 p. [Microfilm] (MLRA 9:6)

1.Deystvitel'nyy chlen AN USSR (for Sokolovskiy).
(Ukraine--Soils)

TYURIN, I.V.; SOKOLOV, A.V.; BUSHINSKIY, V.P.; SOBOLEV, S.S.; FRANTSESSON, V.A.; KARPINSKIY, N.P.; BALYABO, N.K.; GRINCHENKO, A.M.; KRUPSKIY, N.K.

Alekseĭ Nikanorovich Sokolovskiĭ; obituary. Pochvovedenie no.10:124-125 O '59. (MIRA 13:2)
(Sokolovskiĭ, Alekseĭ Nikanorovich, 1884-1959)

KRUPSKIY, N.K.; ALEKSANDROVA, A.M.; GORBAN', Yu.V.

Curves of the potentiometric titration of soil suspensions in anhydrous solvents. Pochvovedenie no. 5:106-110 My '61. (MIRA 14:5)

1. Ukrainskiy nauchno-issledovatel'skiy institut pochvovedeniya.
(Soils--Analysis) (Soil acidity)

KRUPSKIY, N.K.; ALEKSANDROVA, A.N.; KRIZHNYAK, A.I.

Determination of available aluminum in soils. Pochvovedenie no.10:93-96 O '61. (MIRA 14:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut pochvovedeniya imeni A.N. Sokolovskogo.
(Soils—Aluminum content)

S/081/62/000/017/033/102
B162/B 101

AUTHORS: Krupskiy, N. K., Aleksandrova, A. M., Stetsenko, M. V.

TITLE: Detection of chloride ion in muddy and colored ground extracts

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 17, 1962, 132, abstract 17D86 (Pochvovedeniye, no. 2, 1962, 109 - 113 [summary in Eng])

TEXT: In order to determine Cl^- in muddy and colored aqueous ground extracts, the methods applied are potentiometric titration of a solution of the sample (0.5 ml 2N H_2SO_4 per 10 ml of sample solution) acidified with 0.002N $AgNO_3$ solution using an indicating silver chloride electrode (Pt-wire, covered with a mixed paste of Ag_2O and AgCl (7:1) and calcined at 450°C); and visual mercurimetric titration with diphenyl carbazone as indicator in the presence of benzene. To 10 ml of the sample solution, 10 ml of water and then a few drops of 1% solution of diphenyl carbazone are added, neutralized with a 0.2N HNO_3 solution (till yellow color), 5 ml of benzene is added and the mixture titrated with a 0.01N $Hg(NO_3)_2$

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solution until the yellow color of the organic layer changes into violet-blue. Colorless and transparent solutions are titrated without benzene using a mixture of diphenyl carbazone with β-dinitrophenol as indicator. It is expedient to use mercurimetric titration, as a more simple way, when a great number of determinations is made. [Abstracter's note: Complete translation.]

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KRUPSKIY, N.K.; ALEKSANDROVA, A.M.; GUBAREVA, D.N.

Determining the pH value in soils of the Ukrainian S.S.R.
Pochvovedenie no.4:70-78 Ap '62. (MIRA 15:4)

1. Ukrainskiy nauchno-issledovatel'skiy institut pochvovedeniya imeni A.N.Sokolovskogo.
(Ukraine--Soil acidity)

KRUPSKIY, N.K.; TSYGANENKO, O.Yu.

Studying ion exchange processes in soils under dynamic conditions. Pochvovedenie no.8:103-106 Ag '63. (MIRA 16:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut pochvovedeniya imeni A.N.Sokolovskogo.

VLASYUK, P.A., akademik, otv. red.; KOLOMIYTSEVA, M.G., prof., red.; KUPSKIY, N.K., prof., red.; KLIMOVITSKAYA, Z.M., doktor biol. nauk, red.; KURINNAYA, M.F., kand. med. nauk, red.; MITSYK, V.Ye., kand. vet. nauk, red.; KAPITANCHUK, V.A., red.; RUDAKOVA, E.V., kand. biol. nauk, red.; SKUTSKAYA, N.P., red.

[Use of trace elements in agriculture; Republic interdepartmental collection of papers] Primenenie mikroelementov v sel'skom khoziaistve; Respublikanskii mezhvedomstvennyi sbornik. Kiev, Naukova dumka, 1965. 218 p.
(MIRA 18:7)

1. Akademiya nauk URSR, Kiev. 2. Institut fiziologii rasteniy Ukr.SSR (for Vlasyuk, Rudakova).

KRUPSKIY, N.K.; GASAN, P.A.

Colloid-chemical technology of soils and their colmatage technique. Dokl. AN SSSR 165 no.5:1132-1134 D '65.
(MIRA 19:1)

1. Ukrainskiy nauchno-issledovatel'skiy institut pochvovedeniya im. A.N.Sokolovskogo. Submitted May 21, 1965.

1. KRUPSKIY, . . V.

2. USSR (600)

4. Constitutional Law

7. Concept of the Soviet state system.
Vest. Mosk. un 7 no. 7, 1952

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

Kurskiy, I. I.

Tablets (Medicine)

Relay protection against breakdowns of the automatic tablet-making machine. Med. prom. No. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 1952 1953, Uncl.

KRUPSKY, E.

The Czech book in the Soviet Union. p.24.
(Silnice, Vol. 6, No. 5, May 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

KRUPSKY, E.

"Research on highway traffic."

p. 9 (Silnice) Vol. 6, no. 10, Oct. 1957.
Prague, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4, April 1958

KRUPSKY, Emil, inz.

Road capacity and the speed of vehicles. Siln doprava 11 no.10:25 S '63.

KOROB, A.D.; FERDMAN, I.A.; KRUPSKIY, V.I.

Testing capron gear wheels in machine tools. Stan. i instr. 36 no.11:30-31 N '65. (MIRA 18:11)

L 39370-66 EWT(m)/T

ACC NR: AP6017591 SOURCE CODE: UR/0367/66/003/002/0321/0326

AUTHOR: Vishnevskiy, M. Ye.; Galanina, N. D.; Semenov, Yu. A.; Kruptchitskiy, P. A.; Berezin, V. M.; Murysov, V. A.

ORG: none

TITLE: Measurement of the mass difference of K_2^0 and K_1^0 mesons

SOURCE: Yadernaya fizika, v. 3, no. 2, 1966, 321-326

TOPIC TAGS: K meson, mass spectrometry, pion, meson interaction

ABSTRACT: In view of the discrepancies between the experimentally measured mass differences of the K_2^0 and K_1^0 mesons, the authors have measured this mass difference by a coherent regeneration method, based on measurement of the dependence of the intensity of the coherent regeneration of K_1^0 mesons in a beam of K_2^0 mesons on the thickness of the regenerator (copper or aluminum). The experiment was carried out in the ITEF 7-Gev proton accelerator (Fig. 1). The method and the apparatus are briefly described. The K_1^0 mesons were registered by means of the $K_1^0 \to \pi^+ + \pi^-$ decay with the aid of a magnetic spectrometer with scintillation counters and spark chambers. The distributions of the interaction events with respect to the masses of the decaying particle and with respect to the angle between its momentum and primary-beam directions are given. A total of 196 coherently-regenerated K_1^0 mesons were found in 375 tracks. A mass difference of 0.82 ± 0.14 $(\hbar/\tau_1 c^2)$, where $\tau_1 = 0.92 \times 10^{-10}$ sec, was obtained. The distribution of the registered K_1^0 mesons had a maximum at 1.8 Gev/c and dropped to zero at 0.9 and 4 Gev/c. This result agrees well with those obtained by others

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ACC NR: AP6017591

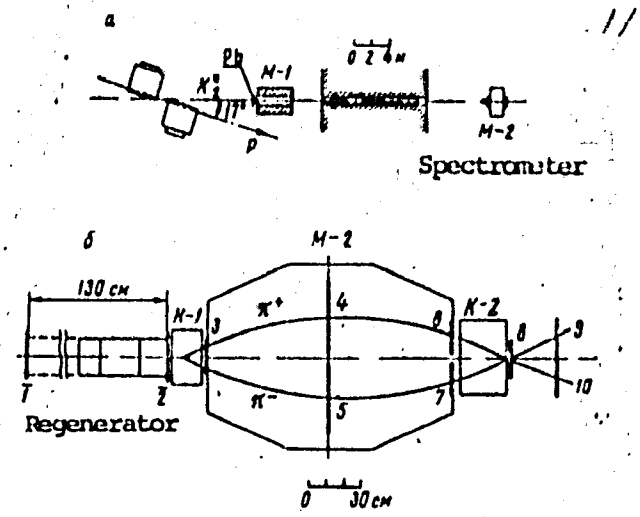

Fig. 1. Experimental setup. a - Beam diagram, b - magnetic spectrometer diagram (the numbers denote particle counters).

using similar methods. The authors thank A. I. Alikhanov and S. Ya. Nikitin for interest in the work, L. B. Okun' and I. Yu. Kobzarev for discussions, L. L. Gol'din and his crew for operating the accelerator, and A. K. Dubasov, V. N. Markizov, N. P. Naumov, V. F. Stolyarov, V. N. Kuz'menkov, and Yu. S. Oreshnikov for help with the apparatus and the measurements. Orig. art. has: 4 figures and 1 formula.

SUB CODE: 20/ SUBM DATE: 30Jun65/ ORIG REF: 003/ OTH REF: 006

Card 2/2 nst

KRUPTSOV, B. A.

AUTHORS: Nazarov, I. N. Member, Academy of Sciences, USSR, Gusev, B. P., Makin, S. M., Kochalin, V. B., Nazarova, I.I., Vinogradov, V. P., Kruptsov, B. K., Shavrygina, O. A., Nazarova, D. V.

20-114-4-32/63

TITLE: The Condensation of Acetylene With Methylheptanone and Its Analogues (Kondensatsiya atsetilena s metilgeptanonom i yego analogami) The Synthesis of Linalool and Its Analogues (Sintez linaloola i yego analogov)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 114, Nr 4, pp. 796-799 (USSR)

ABSTRACT: Several years ago a simple method of synthesis of different acetylene alcohols was worked out in the laboratory of the authors by means of condensation of aldehydes and ketones under the influence of powdery caustic potash with acetylene at high pressure (5-10 at superpressure). It was of interest to employ this method in the condensation of acetylene with methylheptanone and similar ketones, in order to obtain the corresponding acetylenealcohols. Linalool and some analogues may then be obtained easily by partial hydrogenation with a Pd-catalyst. Hitherto such condensations have usually been carried out under the influence of metallic sodium in a solution of liquid ammonia.

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It was found that methylheptanone and its various analogues may be condensed very easily with caustic potash and acetylene at the above-mentioned pressure. At 0-20°C they give as a result the corresponding tertiary acetylene alcohols with an almost quantitative yield (more than 90%). This reaction may also be carried out without acetylene pressure, however, somewhat more slowly and with a yield of only 60-80%. It has been previously shown in the same laboratory that acetylene alcohols which contain a non-substituted acetylenehydrogen may be hydrated highly selectively in the presence of palladium over calcium carbonate or copper coated zinc powder. Thereby vinylalcohols with an almost theoretical yield are obtained. The acetylene alcohols may not be selectively hydrated with other catalysts (Ni, Pt) and are therefore useless in the production of pure vinyl alcohols. An analogous picture may also be noticed with the hydrogenation of the above-described acetylene alcohols which are obtained by condensation of acetylene with methylheptanone and its analogues. These acetylene alcohols may also be highly selectively hydrated in the presence of a Pd-catalyst. They form linalool and its analogues

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with an almost theoretical yield. The purity control of the vinylalcohols (linalool and its analogues) was carried out by means of the acetylene test (with ammonia solution of silver or copper oxide), whose sensitiveness was determined by special tests and amounted to 0.2-0.3%. At the hydrogenation of the acetylene alcohols with a Pd-catalyst the acetylene test always disappears at the theoretical point, that is, as only one hydrogen molecule is strongly attached. The acetylene alcohols obtained in the course of this work are summarized in table 1. Linalool and its analogues (table 2) were obtained by a partial hydrogenation of the above-mentioned acetylene alcohols with Pd-catalysts. In the experimental part the methods and yields of the said substances are described in detail. There are 2 tables and 3 references, 3 of which are Soviet.

ASSOCIATION: Institute for Organic Chemistry imeni N.D. Zelinskiy of the AN USSR and Moscow Institute for Refined Chemical Technology imeni M.V. Lomonosov (Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk SSSR i Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova)

Card 3/4

SUBMITTED: March 12, 1957

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AUTHORS: Nazarov, I. N., Academician, Makin, S. M., Mochalin, V. B., Nazarova, D. V., Vinogradov, V. P., Kruptsov, B. K., Nazarova I. I. and Shavrygina, O. A.

20-114-6-29/54

TITLE: The Synthesis of Methylheptenone and Methylheptadienone Analogues (Sintez analogov metilgeptenona i metilgeptadiyenona)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 114, Nr 6, pp. 1242-1245 (USSR)

ABSTRACT: This synthesis is of interest for the production of a number of corresponding analogues of natural isoprenoid compounds. The initial acetylene-alcohols for this purpose were produced according to the authors' method (reference 1). By a selective hydrogenation in the presence of palladium on calcium-carbonate acetylene alcohols are almost quantitatively converted to analogous vinyl alcohols (reference 2). These latter yield the corresponding analogues of methylheptenone in three different ways (reference 3). Method A. By the influence of gaseous hydrogen chloride or hydrogen bromide upon tertiary vinyl alcohols at 0 - 20°C primary haloid-derivatives of an allyl-type easily form (reference 4). Their condensation with sodium-acetate-acetic-ether with a subsequent saponification

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leads to methylheptenone analogues. Method B. At 140 - 190°C tertiary vinyl alcohols directly react with the same ether. An almost theoretical quantity of ethanol and CO_2 is separated and the same analogues as in A) are obtained. Method V. By the action of diketene upon tertiary vinyl alcohols in the presence of small amounts of triethylamine or piperidine, acetoacetic ethers of these alcohols are obtained (table 2). Their pyrolysis also leads to the above-mentioned analogues (reference 6). The 2,3-dimethyl-2-heptene-6-on (IV) necessary for the synthesis of irone was produced all three ways mentioned. Dimethylisopropenyl-carbinol (initial substance) was produced by the influence of methyl-lithium upon methyl-metacrylate. All methyl-heptenone analogues produced are comprised in table 1. The authors further produced: allyl- (I) (reference 9), crotyl- (II) and chlorocrotyl-acetone (III) (reference 8), dimethyl-isopropenyl-carbinol-acetoacetate, dimethylheptenone (IV), cyclohexylidenpentanone (IX) and tertiary butylheptadienone (XIII). The production methods and constants of these substances are given. There are 2 tables and 12 references, 6 of which are Slavic.

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ASSOCIATION: Institute of Organic Chemistry ... Zelinskiy AS USSR and Institute for Fi... ... imeni M. V. Lomonosov, Moscow (Instit... ...im. N. D. Zelinskogo Akademii nauk ... Institut tonkoy khimicheskoy tekhnologii ...)

SUBMITTED: March 12, 1957

Card 3/3

AUTHORS: Nazarov, I. N., Member of the Academy, 20-117-5-27/54
(Deceased), Makin, S. M., and Kruptsov, B. K.

TITLE: The Synthesis of Ethoxyisoprene (Sintez etoksiizoprena).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 117, Nr 5, pp. 823-825 (USSR)

ABSTRACT: The alkoxydienes are interesting for the organic chemistry by the presence of 2 double conjugated formations since they can be used furthermore for the synthesis of various substances in consequence of a alkoxyl group capable of reaction. Especially intersting is the ethoxy-isoprene (1-ethoxy-3-methyl-butadiene-1,3) since it can be used for the synthesis of important isoprenoids (zitral, vitamin A, carrotine and others). It has a methyl-branching in the third position and has therefore an isoprenoid structure. Reactions (I) - (IV) are given by means of which the authors have obtained the synthesis mentioned in the title. By action of tetra-ethoxysilane on acetone the acetone-diethyl-ketal (II) was obtained- The syntheses according to former references (reference 1) led to only small yields (10-15%). The authors obtained yields of 92% of acetone-ketal (in presence of 0,5 mol ethanol pro 1 mol tetra-ethoxysilane) by the application of phosphorous acid of 85 % as catalyst. Acetone-

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diethylketal was then introduced into the condensation reaction with vinyl-ethyl-ether. The addition of ketals to these ethers was hitherto scarcely researched. The authors succeeded in carrying out this reaction at 0° and in presence of catalytic quantities of tri-fluorboron-ethyrate with a yield of 85% of 3-methyl-1, 1,3 triethoxybutane, with reference to the acetone-diethylketal which entered into the reaction. In order to prevent a further condensation a ketal excess has to be used which is higher by 1,5 times. In the case of passage of vapors of the 1,1,3-triethoxy-3-methylbutane by $MgHPO_4$-catalyst at 350° in a 15-20 mm-vacuum 2 alcohol molecules are splitted off and ethoxyisoprene is formed with a yield of 77%. Furthermore this latter substance was obtained with a good yield in the passage of vapors of the β-methyl-croton-aldehyde-diethylacetal over the contact catalyst NaH_2PO_4. The initial substance in question was produced from iso-valerian-aldehyde (reference 6). In the experimental part the usual data are given with the preparation of the catalyst.

The Synthesis of Ethoxyisoprene

20-117-5-27/54

There are 6 references, none of which are Slavic.

ASSOCIATION: Institute for Fine Chemical Technology imeni M. V. Lomonosov, Moscow (Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova).

SUBMITTED: September 11, 1957

Card 3/3

FLID, R.M.; KRASOTKIN, A.Ye.; SHPICHINETSKAYA, L.S.; CHIRIKOVA, A.V.; BELYY, A.P.; BARATS, M.I.; KRUPTSOV, B.K.; BELYANINA, Ye.T.

Effect of alcaline admixtures on catalytic oxidation of primary alcohols to aldehydes. Khim.nauk i prom. 3 no.5:683 '58.

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M.V. Lomonosova.

(Alcohol) (Oxidation) (Catalysts)

AUTHORS: Nazarov, I. N.(Deceased), Makin, S. M., SOV/79-29-1-25/74
Kruptsov, B. K., Mironov, V. A.

TITLE: Synthesis of Acetals and Ketals by Means of Tetraalkoxy-Silanes (Sintez atsetaley i ketaley s pomoshch'yu tetraalkoksi-silanov)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 1, pp 106-111 (USSR)

ABSTRACT: It is known that the most suitable acetylating agents are the esters of the ortho-formic acid. Owing to their high costs they can however not be used as initial substance for the synthesis of acetals. As a substitute for the above esters the authors chose the easily available esters of the ortho--silicic acid (tetraalkoxy-silanes). Helferich and Hansen (Ref 1) found that the tetraalkoxy-silanes are able to acetylate aldehydes and ketones in alcoholic medium in the presence of hydrogen chloride. The authors met however with many difficulties at the attempt to obtain some acetals and ketals according to this method and the yields were also small. For this reason, they investigated thoroughly the reaction of the tetraalkoxy-silanes with aldehydes and ketones under different conditions. On the reaction of acetone with

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tetraalkoxy-silane they used HCl, concentrated H_2SO_4, p-toluenesulfonic acid, phosphoric acid, etc. as catalysts for the acetylation. Phosphoric acid proved to be the most suitable catalyst. In contrast with the general opinion, tetraalkoxy--silanes react well with aldehydes and ketones in the presence of some alcohol. Thus the diethyl ketal of acetone with tetraethoxy-silane was obtained in 93 % yield, on addition of 0.5 % alcohol only. Many other acetals of various aldehydes, ketones, etc. were synthesized also with good yields and very limited use of alcohol. The small alcohol quantity is important in the synthesis of low-boiling acetals and ketals: It is thus possible to obtain in the distillation the acetal and ketal with minute alcohol quantities which can easily be removed by water, which is rather difficult at higher quantities of alcohol. In the synthesis of high-boiling acetals the amount of the easily separable alcohol is of no importance. In the acetylation of the croton aldehyde the alcohol quantity is of particular importance: At 0.1-0.2 mol alcohol with 1 mol aldehyde dimethyl and diethyl acetal were resulting in a yield

up to 80 %. On addition of more than 1 mol alcohol 1,1,3-trialkoxy-butanes are formed as main products (Ref 2). Without any alcohol the reaction yields 47 % only. For the removal of the acetals and ketals two methods were applied according to whether they are lower or higher boiling than the tetraalkoxy-silanes used in the reaction (see experimental part). The diethyl acetals of the croton aldehyde and methyl heptenone were obtained in good yield by the esters of ortho-formic acid as well. Both tables present all acetals and ketals synthesized. There are 2 tables and 3 references, 1 of which is Soviet.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii (Moscow Institute of Fine Chemical Technology)

SUBMITTED: July 19, 1957

AUTHORS: Nazarov, I. N.(Deceased), SOV/79-29-1-26/74
Makin, S. M., Kruptsov, B. K., Mironov, V. A.

TITLE: Synthesis of Vinyl and Diene Ethers (Sintez prostykh vinilovykh i diyenovykh efirov)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 1, pp 111-117 (USSR)

ABSTRACT: In the passage of the vapors of dimethyl and diethyl acetals of the acetone of acetic acid, propione, butyric acid, isobutyric acid, as well as of the dimethyl and diethyl ketals of acetone and cyclohexanone over NaH_2PO_4 and $MgHPO_4$ (as catalysts) at 300-375° the authors obtained the substituted vinyl ethers listed in table 1. The simple diene ethers are considerably interesting in organic chemistry since they possess two conjugated double bonds and a reactive alkoxy group. Furthermore, methoxy and ethoxy isoprenes were synthesized and the methoxy and ethoxy butadienes previously described (Refs 7,8,9) were investigated. The alkoxy dienes specified were obtained by catalytic cleavage of the acetals of croton and β-methyl-croton aldehyde, as well as of the 1,1,3-trialkoxy-butanes and 1,1,3-trialkoxy-3-methyl butanes. The dimethyl and diethyl

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acetals of β-methyl-croton aldehyde were synthesized according to scheme 1 in the presence of small quantity of $BF_3O(C_2H_5)_2$, the butanes mentioned according to reference 7 and scheme 2 (Refs 11,14,15,16). The catalytic cleavage of the acetals of croton and β-methyl-croton aldehyde, as well as of the trialkoxy-butanes into the simple diene ethers was thus carried out on the catalysts NaH_2PO_4 and $MgHPO_4$. Active charcoal, silica gel, and glass were used as carriers. This process proceeded in vacuum 10-20 mm in the nitrogen current (Scheme 3). The maximum yield of ethoxy-isoprene was attained on the catalysts $MgHPO_4$ on active charcoal and $MgHPO_4 \cdot NaSiO_3$ (Table 2). As to durability, $MgHPO_4$ on charcoal proved to be the best catalyst. The activity of the catalysts produced from NaH_2PO_4 decreases more rapidly. On the catalytic cleavage of the 3-methyl-1,3-dimethoxy-1-ethoxy-butane a mixture from methoxy- and ethoxy—isoprene resulted in about the same quantity. There are 2 tables and 16 references, 8 of which are Soviet.

Synthesis of Vinyl and Diene Ethers SOV/79-29-1-26/74

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii (Moscow Institute of Fine Chemical Technology)

SUBMITTED: September 10, 1957

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5 (3)

SOV/79-29-3-4/61

AUTHORS: Nazarov, I. N. (Deceased), Makin, S. M., Mochalin, V. B., Shavrygina, O. A., Nazarova, D. V., Kruptsov, B. K.

TITLE: Synthesis of Analogues of Geranyl Acetone and Pseudoionone (Sintez analogov geranilatsetona i psevdoionona)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 3, pp 744-753 (USSR)

ABSTRACT: These analogues are initial products for the synthesis of the corresponding analogues of the most important natural isoprenoid compounds, of vitamin A, carotene, farnesol, as well as of phytol, a component of vitamins K and E. Recently, the authors reported on three syntheses of ketones of the isoprenoid type carried out by them: 1) By reaction of sodium acetoacetic ester with halogen derivatives of the allyl type (method A). 2) By reaction of vinyl- and ethynyl carbinols with acetoacetic ester (method B). 3) By pyrolysis of the acetoacetates of vinyl- and ethynyl carbinols (method V). This method was used to obtain methyl heptenone, methyl heptadienone and their analogues (Refs 1, 2). By condensation of methyl heptenone and its analogues with acetylene under pressure (5-10 atmospheres excess pressure), dehydrolinalool and its analogues resulted almost quantitatively. These com-

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SOV/79-29-3-4/61

Synthesis of Analogues of Geranyl Acetone and Pseudoionone

pounds were transferred by partial hydrogenation over a Pd-catalyst into linalool and its analogues (Ref 3). The three methods used for the synthesis of the ketones of the isoprenoid type were also employed for the synthesis of various analogues of geranyl acetone (Scheme 1). The synthesized analogues of geranyl acetone are shown in table 2. The synthesis of the pseudoionone analogues was carried out according to the methods B and V. In heating the analogues of dehydrolinalool with acetoacetic ester the analogues of pseudoionone were formed (Table 3) (Scheme 2), in yields of 50-70%. The pyrolysis of acetoacetates of the dehydrolinalools preponderantly leads to one of the pseudoionone isomers; the other is obtained but in small quantities, which is not the case with the pseudoionone analogues (VIII) and (IX), where two stereoisomeric forms (Table 3) were separated in form of their hydrazones. The compounds synthesized are characterized by absorption spectra in the ultraviolet range. There are 3 tables and 7 references, 5 of which are Soviet.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii (Moscow Institute of Fine Chemical Technology)

Card 2/3

84876

158104

S/079/60/030/010/016/030
B001/B066

AUTHORS: Makin, S. M. and Kruptsov, B. K.

TITLE: Chemistry of Unsaturated Ethers. V. Acetals of Vinyl Acetaldehyde. A New Method of Synthesizing 1-Alkoxy-dienes-1,3

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 10, pp. 3276 - 3280

TEXT: The authors of the present paper investigated the autocondensation of vinyl ethyl, vinyl butyl, and vinyl isoamyl ethers in the presence of $BF_3 \cdot O(C_2H_5)_2$, in the complex with HgO, $Hg(OCOCH_3)_2$, $HgSO_4$, $HgCl_2$, of $FeCl_3$ in the complex with HgO and $Hg(OCOCH_3)_2$, and of $ZnCl_2$ in the complex with HgO. Acetone, dimethyl formamide, diethyl ether, nitromethane, and acetophenone were used as solvents. The autocondensation was most efficient in acetone or diethyl ether when using $BF_3 \cdot O(C_2H_5)_2$ in the complex with HgO or $Hg(OCOCH_3)_2$. The acetal of vinyl acetaldehyde

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Chemistry of Unsaturated Ethers. V. Acetals of Vinyl Acetaldehyde. A New Method of Synthesizing 1-Alkoxy-dienes-1,3

S/079/60/030/010/016/030
B001/B066

and a small amount of condensation products of this acetal with vinyl alkyl ethers was thus obtained. In the absence of $BF_3 \cdot O(C_2H_5)_2$, HgO and mercury acetate are ineffective. On the other hand, vinyl alkyl ethers are known to polymerize readily in the presence of $BF_3 \cdot O(C_2H_5)_2$, so that the autocondensation was assumed to take place in two stages, first under the formation of an acetal acylal (III) (Ref.4) which is added in the second stage to the other molecule of the vinyl alkyl ether by means of the catalyst (Refs.5-7) (Scheme 2). The autocondensation of vinyl alkyl ethers by means of $HgO + BF_3 \cdot O(C_2H_5)_2$ obviously takes place according to Scheme 3. The resultant acetals of vinyl acetaldehyde are added to a molecule of the vinyl alkyl ether, thus forming 1,1,3-trialkoxy compounds (VI) (Scheme 4). This reaction, however, proceeds slowly and with low yields of the compounds (VI). The highest yield was 24%. The infrared spectra of the autocondensation products of vinyl ethyl and vinyl butyl ethers showed frequencies characteristic of the vinyl group (CH_2—CH-) (Ref.9). The spectrum of the diethyl acetal

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Chemistry of Unsaturated Ethers. V. Acetals of Vinyl Acetaldehyde. A New Method of Synthesizing 1-Alkoxy-dienes-1,3

S/079/60/030/010/016/030
B001/B066

of croton aldehyde shows an absorption band characteristic of a substituted vinyl group (Ref. 9). When passing acetal vapors of vinyl acetaldehyde in vacuo at 350°C over the acid catalyst $MgHPO_4$, 1-alkoxy-butadiene-1,3 (VII) resulted (Scheme 5). With maleic aldehyde, the 1-alkoxy-dienes-1,3 gave the adducts (VIII). Their hydrolysis (Scheme 6) yields crystalline alkoxy-tetrahydrophthalic acids (IX). There are 12 references: 9 Soviet, 2 US, and 1 Japanese.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii (Moscow Institute of Fine Chemical Technology)

SUBMITTED: December 7, 1959

Card 3/3

KRUPTSOV, B. K.

Cand Chem Sci - (diss) "Synthesis and transformations of simple vinyl and diene esters." Moscow, 1961. 15 pp; (Academy of Sciences USSR, Inst of Organic Chemistry imeni N. D. Zelinskiy); 200 copies; price not given; (KL, 6-61 sup, 198)

MAKIN, S.M.; KRUPTSOV, B.K.

Chemistry of unsaturated ethers. Part 5: Acetals of vinylacetaldehyde. New method of synthesizing 1-alkoxy-1, 3-dienes. Zhur.ob.khim. 30 no.10:3276-3280 O '61. (MIRA 14:4)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii.
(Ethers) (Acetaldehyde)

MAKIN, S.M.; KRUPTSOV, B.K.

Chemistry of unsaturated ethers. Part 12: Structural orientation of diene condensations of 1-alkoxydienes with asymmetrical dienophyls. Zhur.ob.khim. 32 no.8:2521-2527 Ag '62. (MIRA 15:9)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.

(Butadiene) (Ethers)

MAKIN, S.M.; KRUPTSOV, B.K.; MEDVEDEVA, V.M.; SMIRNOVA, L.N.

Chemistry of unsaturated ethers. Part 13: Reaction of acetalization of 1,1,3-trialkoxyalkanes and the synthesis of 1-alkoxy-1,3-dienes with heavy alkoxy groups. Ultraviolet spectra and Raman spectra of 1-alkoxy-1,3-dienes. Zhur.ob.khim. 32 no.8:2527-2535 Ag '62. (MIRA 15:9)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova.

(Butadiene—Spectra) (Alkoxy groups)

6

KAMEYEVA, A.F., MUZYCHENKO, L.A., KHCHEYAN, KH.YE., PAVLICHEV, A.F., ARUTYUNAN, S.M., KRUPNOV, B.K.

Experimental data about the production of phthalic anhydride by oxidation of o-xylol

Report to be submitted for the 12thConference on high molecular weight compounds devoted to monomers, Baku, 3-7 April 62

FILOV I.V., A.V.; KRUPNOV, G.P.

Addition of diphosphorous acid anilide to Schiff bases. Zhur. ob. khim. 35 no.8:1502-1503 Ag '65. (MIPA 18:8)

1. Kazanskiy gosudarstvennyy universitet.

AL'PERIN, P.M., doktor med.nauk; ANSHELVITS, M.Ya.; GUREVICH, I.B.; KRUPYANKO, V.Ye.; MINAKHOVA, O.P.; RODINA, R.I. (Moskva)

Compound treatment of suppurative diseases of the lungs. Vrach.delo no.12:1343 D '57. (MIRA 11:2)

1. Tsentral'nyy ordena Lenina Institut gematologii i perelivaniya krovi.
(LUNGS--DISEASES)

KRUPYANKO, V.Ye.

Effect of blood transfusion on renal function and plasma flow in anemias [with summary in English, p.62]. Probl.gemat. i perel. krovi 4 no.2:46-49 F '59. (MIRA 12:2)

1. Iz TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov) Ministerstva zdravookhraneniya SSSR.
(ANEMIA, ther.
blood transfusion, eff. of homologous blood on renal funct. (Rus))
(BLOOD TRANSFUSION, in var. dis.
anemia, eff. of homologous blood on renal funct. (Rus))
(KIDNEYS, physiol
eff. of transfusion of homologous blood in ther. of anemia (Rus))

AL'PERIN, P.M., prof.; ANSHEVITS, M.Ya.; GUREVICH, I.B.; KRUPYANKO, V.Ye.; MELEKHOVA, O.P.; RODINA, R.I.

Treating bronchiectasis and abscess of the lungs with antibiotics in combination with hemotherapy. Sov.med. 24 no.9:51-56 S '60. (MIRA 13:11)

1. Iz TSentral'nogo ordena Lenina instituta gematologii i pereliyaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov) Ministerstva zdravookhraneniya SSSR.

(BRONCHIECTASIS) (LUNGS--ABSCESS) (ANTIBIOTICS) (BLOOD--TRANSFUSION)

BAGDASAROV, A.A., prof. [deceased]; AL'PERIN, P.M., prof.; KLUPYANKO, V.Ye.; POLUSHINA, T.V. (Moskva)

Use of polyglucin in the treatment of edema. Klin.med. no.1: 91-94 '62. (MIRA 15:1)

1. Iz TSentral'nogo ordena Lenina instituta gematologii i pereli-vaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov [deceased]).

(DEXTRAN) (EDEMA)

KRUPYANSKAYA, V.Yu.

"Some aspects of the mode of life of workers of the Chiatura manganese industry." A.I.Robakidze. Reviewed by V.IU.Krupianskaia. Sov.etn. no.3:160-162 '54. (MLRA 7:11)
(Chiatura--Labor and laboring classes) (Labor and laboring classes--Chiatura) (Robakidze, A.I.)

AKADEMIA NAUK SSSR

AUTHOR: Krupyanskaya, V. Yu., Candidate of Philological Sciences 30-2-27/49

TITLE: Scientific Connections Between Ethnographers of the Soviet Union and of Czechoslovakia (Nauchnyye svyazi mezhdu etnografami Sovetskogo Soyuza i Chekhoslovakii)

PERIODICAL: Vestnik Akademii Nauk SSSR, 1958, Nr 2, p 92. (USSR)

ABSTRACT: Soviet scientists took part in conferences dealing with the way of life of the workers which were called by the Czechoslovakian and Slovakian Academy of Science. The Czechoslovakian specialists for problems of the way of life of the worker K. Foytik and O. Skal'nikova visited the scientific conferences of the Institute for Ethnography of the AN USSR. K. Foytik, O. Syrovatka, O. Skal'nikova, V. Korbusitskiy and Ya. Iyekh investigated several industrial areas of the country and compiled monographs on this field. The author had been invited to attend a meeting of the Slovakian Academy of Science at the end of 1957. A number of general questions were investigated: the application of the method of enquete in monographic research, the way of

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Scientific Connections Between Ethnographers of the Soviet 30-2-27/49
Union and of Czechoslovakia

investigating the intellectual life of the population and the coordination of work. The author in particular underlines the here applied method of parallel folkloristic and ethnographic investigations.

AVAILABLE: Library of Congress

1. Ethnology-Czechoslovakia 2. Ethnology-USSR 3. Economic conditions-Czechoslovakia

Card 2/2

KRUPYANSKAYA, V. YU. POTAPOV, L. P. TERENTIEVA, L. I.

"PROBLEMES ESSENTIELS DE L'ETUDE ETHNIGRAPHIQUE DES PEUPLES DE L'URSS"

report presented at The Sixth International Congress on Anthropological and Ethnological Sciences, Paris 31 July-7 August 1960.

KRUPYANSKIY, F. Yu

Organizatsiya i planirovaniye pochtovoy svyazi (Organization and planning of postal communications by) A. A. Vishnevskiy i F. Yu Krupyanskiy Moskva, Svyazizdat, 1952. 458 p. diagrs., tables.

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SOLOVEYCHIK, L.M.; GENIN, L.S.; KRUPYANSKIY, F.Yu.; RAZGOVOROV, A.V.; TRAUBENBERG, I.A.; RUBINA, P.M., otv. red.; KUZ'MINA, R.A., red.

[Principles of the methodology of planning future needs in general usage service] Osnovy metodologii perspektivnogo planirovaniia potrebnostei v sviazi obshchego pol'zovaniia; informatsionnyi sbornik. Moskva, Sviaz', 1964. 77 p.
(MIRA 17:12)

VISHNEVSKIY, Aleksandr Appolinar'yevich, doktor ekon. nauk, prof.;
KRUPYANSKIY, Fedor Yur'yevich, kand. ekon. nauk, dots.;
PAPINAKO, I.G., red.

[Organization and planning of postal communications] Organizatsiia i planirovanie pochtovoi sviazi. Moskva, Izd-vo "Sviaz'," 1964. 328 p. (MIRA 17:8)

KHUPYANSKIY, Fedor Yur'yevich; VISHNEVSKIY,A.A., redaktor; ANDRIYENKO,Z.D., redaktor; KHALIMSKAYA,L.M., tekhnicheskiy redaktor

[Labor productivity in communication] Proizvoditel'nost' truda v khoziaistve sviazi. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1954. 34 p. [Microfilm] (MLRA 9:3)
(Communication and traffic) (Labor productivity)

KRUPYANSKIY, F.Yu.; VLASOV, M.A., otvetstvennyy redaktor; SIDOROVA, T.S., redaktor; BERESLAVSKAYA, L.Sh., tekhnicheskiy redaktor.

[Labor productivity in communications and ways of increasing it] Proizvoditel'nost' truda v khoziaistve sviazi i puti ee povysheniia. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1957. 67 p. (MLRA 10:4)

(Labor productivity) (Telecommunication)

KRUPYSHEV, G.N.

PA - 3111

AUTHOR: ZHEZHERIN, R.P., KRUPYSHEV, G.N., MARTYNOV, A.M. (Leningrad)
TITLE: A Parametric Generator.
(Parametricheskiy generator. Russian).
PERIODICAL: Elektrichestvo. 1957, Nr 5, pp 69 - 71 (U.S.S.R.)
Received: 6 / 1957 Reviewed: 7 / 1957

ABSTRACT: The parametric 3PG generator finds its practical application as a power supply source for radio technical and other installations with an output from several dozen to several hundred watts. It is an A.C. machine whose ferromagnetic rotor exhibits its own cogged form and which has no windings. The 3PG generator forms its own group of machines. The selfregulation of the generator is investigated and then the working characteristics. The greatest interest for the practical application of the 3PG is its use as a single phase current source with raised frequency in connection with an effective load. The peculiarity of the 3PG with a given torrional moment is that by reducing the effective load P_2 hardly changes its speed at all.

The output consumed by the generator, however, appears in itself as loss. The 3PG is very simple in its construction which guarantees its dependability in action. It is practical to use the generator under a work laod as a current source of less output (10 - 200 W) with a raised frequency of 400 to 2000 Cycles. A valuable attribute of this generator is the possibility of its application in connec-

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PA - 3111

A Parametric Generator.

tion with hard to regulate systems. In these cases the 3PG generator makes it possible to maintain a sufficiently stable voltage by modifying the load from zero to a nominal value. (with 6 illustrations).

ASSOCIATION: Not given
PRESENTED BY:
SUBMITTED: 29.10.1956
AVAILABLE: Library of Congress

Card 2/2

SOV/110-59-2-2/21

AUTHORS: Zhezherin, R.P., Candidate of Technical Sciences, and Krupyshev, G.N., Engineer

TITLE: A Machine Type High-Frequency Generator with Excitation Circuits (Elektromashinnyy generator vysokoy chastoty s vozbuzhdayushchimi konturami)

PERIODICAL: Vestnik Elektropromyshlennosti, 1959, Nr 2, pp 4-8 (USSR)

ABSTRACT: Valve type generators for frequencies of 10 - 30 kc/s and above are very bulky and are difficult to operate on variable loads. There is accordingly great need of machine type generators for such frequencies. The authors have found a new way of increasing the frequency developed by a machine without altering the number of poles on the rotor. With the new generator it is possible to obtain frequency twice as high as from machines of the normal inductor type. This article describes the construction and operating principles of the generator and gives experimental test data. The aim of the tests was not to obtain the highest possible frequency but only to verify the principle of the machine. The machine is illustrated schematically in Fig 1; it has a toothed rotor like that of reactive or inductor machines. On the

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A Machine Type High-Frequency Generator with Excitation Circuits

stator there are teeth which form ridges displaced from one another by an angle of $\pi/2$. So far the generator construction is similar to that of a two-phase inductor machine. Three types of winding are located in the stator slots between the ridges, a control winding with direct current, a two-phase a.c. excitation winding with frequency f_2 and a single phase generated current winding of frequency f_4. It is explained that $f_4 = 2f_2$. To save space the control and excitation winding can be combined, and this is the circuit illustrated in Fig 2. The operating principles of the generator are as follows: The d.c. in the control winding sets up a magnetic field between the stator and rotor, the distribution of which depends on the position of the rotor teeth. As the rotor turns there is periodic redistribution of this flux between the stator teeth and so e.m.f.'s are induced in the windings just as in a two-phase inductor machine. The connections to each phase are brought out separately, each phase is connected to a capacitor and, therefore, capacitative currents of frequency f_2 flow in the excitation coils. The magnetic reaction field set up by

A Machine Type High-Frequency Generator with Excitation Circuits

the capacitative currents is the excitation field for e.m.f.'s of frequency f_4 that are set up in each of the stator coils. The excitation windings are so connected that the sum of the f_4 frequency currents in them is zero, but in the working windings the e.m.f.'s of frequency f_4 are added together and those of frequency f_2 subtracted. The load is supplied at a frequency f_4 and is connected to the generator terminals through a series capacitor as in Fig 2c or through a parallel capacitor as in Fig 2b. Tests were made on an experimental machine, the main dimensions of which are given. The profiles of the stator and rotor stampings are shown in Fig 3. Design details of the windings are given. The way in which the no-load characteristic is affected by the value of the capacitance in the excitation circuit is demonstrated graphically in Fig 4. The shape of these curves is discussed. Short circuit curves with various values of capacitance in the excitation circuit are given in Fig 5. The relationship between the operating voltage and the control current is given in Fig 6, with one value of capacitance and several values of active load. If

A Machine Type High-Frequency Generator with Excitation Circuits

the load is too heavy, particularly if it is inductive, the machine may fail to excite. The behaviour of the generator on purely capacitative loads is explained with reference to Fig 7. Figs 8 and 9 show regulation characteristics for two different values of capacitance when the load beyond the series capacitor is pure resistance. The effect of voltage on the regulation characteristics is illustrated by the graphs of Fig 10. The external characteristics of the generator are shown in Fig 11 for three types of load, and in Fig 12 for active load in the circuit with series capacitor and without it for two values of control current. The generator has good amplifying properties combined with low time constants of all the circuits. The oscillogram given in Fig 13 shows the speed at which the output voltage of the generator falls when the control winding is short circuited. The reactive output of the phase capacitors

A Machine Type High-Frequency Generator with Excitation Circuits

is approximately 4 - 5 times greater than the total active output of the load circuit. The generator can also be used as a two-phase inductor.

There are 13 figures.

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SOV/138-58-11-2/14

AUTHORS Mel'son, K. V; Podlubnyy, I. Ya; Krupyshev, K. A. and Stepanova, Z. D.

TITLE: Investigations on the Micro-Structure of Butadiene Rubbers (Issledovaniye mikrostruktury divinilovykh kauchukov)

PERIODICAL: Kauchuk i Rezina, 1958, Nr 11, pp 3 - 5 (USSR)

ABSTRACT: S. V. Lebedev et al. (Ref.1 - 3) determined the influence of the polymerisation temperature on the content of side chains (vinyl groups) in butadiene rubbers obtained by polymerisation with Li, Na and K. With the aid of this data, dependence of the glass temperature of butadiene polymers on the number of monomer chains, added in the 1,2 position, could be determined (Refs. 5 and 6). The micro-structure of polymers can be defined effectively by analysing their absorption spectra in the infra-red region. Results are given on the dependence of the micro-structure of butadiene rubbers, obtained by catalytic polymerisation, on the conditions of their preparation, the nature of the initiator (Li, Na and K) and the temperature of the process. The infra-red spectra between 800 - 1,000 cm^{-1} were analysed. The polymer molecule in buta-

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diene rubbers shows three types of addition to the C=C bond; in the 1,2-, trans-1,4- and cis-1,4- position. If the addition occurs in the 1,2-position absorption occurs in the 909 cm^{-1} band; heptene-1 was taken as a standard. Analysis of the trans-1,4 configuration showed absorption in the 967 cm^{-1} band; in this case trans-octene-3 and trans-decene-5 were taken as standard. All samples were tested in CS_2 solutions on a VIKS-MZ apparatus with a NaCl prism. The samples were prepared by Z. A. Khrenovaya. The average experimental error was ±5%. The lithium-sodium- and potassium-butadiene polymers were prepared by polymerising butadiene when the temperatures of the thermostat were as follows:- 5, 10, 20, 30, 40 and 60°C. Neozone D (2%) was added to the polymer samples after the gaseous products had been separated under vacuum. The glass temperature, viscosity and physico-mechanical properties of the samples were determined (Table 1). After purification and vacuum drying at room temperature, 1% of solutions in CS_2 were prepared. Data on the quantitative determination of the micro-structure of the rubbers is given in Table 2.

Card 2/4 The polymerisation temperature influences the micro-structure

of lithium-butadiene rubbers (Fig.1). The micro-structure of sodium butadiene rubbers, prepared at various temperatures, is similarly affected (Fig.2). On increasing the polymerisation temperature a decrease in the addition in the 1,2 position and an increase in the number of chains in the cis-1,4 position can be observed. The trans-1,4 configuration does practically not change, and remains at approximately 15%. Hardly any changes occur in the investigated temperature interval in the micro-structure of potassium butadiene rubbers (Fig.3). The ratio:

$$\frac{\text{trans-1,4}}{\text{cis-1,4}}$$

for all samples was $\sim$3 (trans-1,4 $\sim$30% and cis-1,4 $\sim$10%) These results agree with data published by A.I.Yakubchik

SOV/138-58-11-2/14

Investigations on the Micro-Structure of Butadiene Rubbers

et al. (Refs. 2 and 3). There are 2 Tables, 3 Figures and 11 References: 3 English and 8 Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S. V. Lebedeva (Research Institute for Synthetic Rubber im. S. V. Lebedev)

Card 4/4

[illegible], A. A., Chesnokova, N. N., [illegible]

[illegible] and kinetics of [illegible]

SOURCE: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka.

[illegible]

[illegible] isoprene polymerization, kinetics, [illegible] catalysis

[illegible] Effect of temperature and [illegible] catalyst on isoprene polymerization [illegible]

[illegible] The [illegible] is described by the equation

$$W \approx \frac{a k_1 k_2 m_0}{k_3} (r_0 - K)$$

where: a is a proportionality coefficient, k_1, k_2, and k_3 are rate constants of

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the elementary steps of formation of active catalytic centers

$$TiCl_3^{*}\ R_2AlCl + C_5H_8 \xrightarrow{k_1} TiCl_3^{*}\ R\,(C_5H_8)\,AlR\ldots$$

$$TiCl_3^{*}R\,(C_5H_8)_i\ AlRCl + C_5H_8 \xrightarrow{k_2} TiCl_3^{*}R\ [illegible]$$

$$TiCl_3^{*}R\,(C_5H_8)_i\ AlRCl \xrightarrow{k_3} TiCl_3^{*} + R\,(C_5H_8)_i\ AlRCl$$

... is the actual initial isoprene concentration in the system in mol/l, n_0 is the ... concentration of $TiCl_3$ molecules ... [illegible] ... constant ... polymerization reaction ... [illegible] ... energy of ... formation ... [illegible] ... isoprene polymerization

$$-\ln(1 - x) = 2\beta e^{-\frac{E}{RT}} \left(\frac{D}{\pi}\right)^{1/2} n_0^{1/3} \left(\tau^{1/2} - \tau_0^{1/2}\right)$$

where: x is fraction of converted isoprene, β is a proportionality coefficient, D ... diffusion coefficient ($mol \cdot cm^2 \cdot min^{-1}$), τ_0 and τ ... initial and final instants ... polymerization reaction. In the case of ... polymerization in absence

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AM NF AT5019607

[illegible] of polymer [illegible] commercial [illegible]

$$x = \frac{[illegible]}{[illegible]}$$

[illegible] of polymerization in the [illegible] period is pro- [illegible] are part of the [illegible]

$$r = 2\beta \left[illegible\right]$$

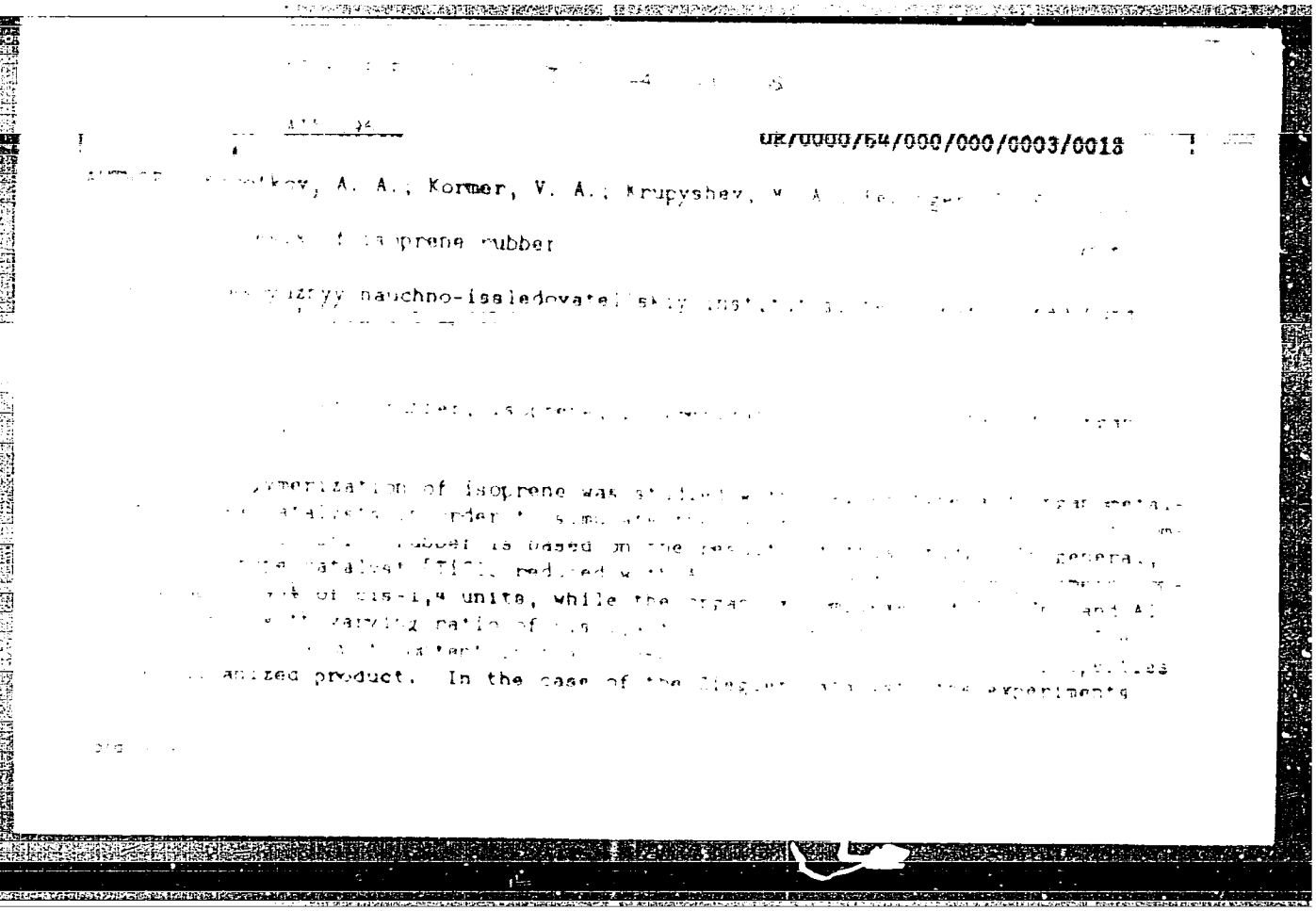
[illegible] molecular weight is prac[illegible] depth of [illegible] decrease with [illegible] and it is almost independent of catalyst concentration. The polymer microstructure is insensitive to changes in reaction temperature and to variations in monomer or catalyst [illegible] fig. art. has 2 tables, 13 formulas, and 10 formulas.

[illegible]

SUBMITTED: 24Oct64 ENCL: 00 SUB CODE: MT,GC

NO REF SOV: 005 OTHER: 001

Card 3/3



UR/0000/64/000/000/0003/0018

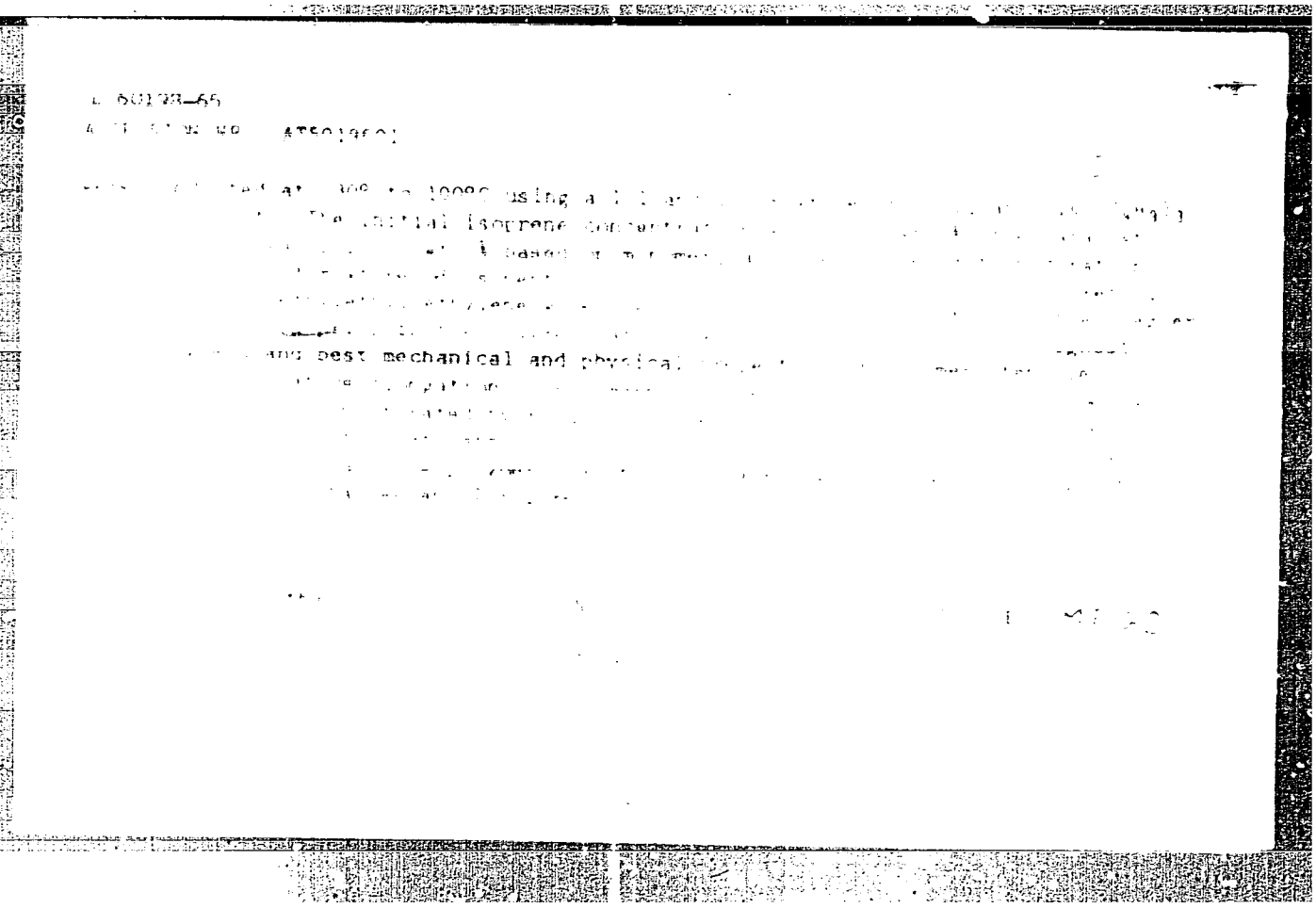
[illegible]kov, A. A., Korner, V. A., Krupyshev, [illegible]

[illegible] isoprene rubber

[illegible] nauchno-issledovatel[illegible]

[illegible]

[illegible]merization of isoprene was [illegible] [illegible] metal-[illegible] [illegible]rder [illegible] [illegible] [illegible] rubber is based on the [illegible] [illegible] general, [illegible] catalyst [illegible] produced [illegible] [illegible] [illegible] of cis-1,4 units, while the [illegible] [illegible] and A[illegible] [illegible] varying ratio of [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] anized product. In the case of the [illegible] [illegible] the experiments



and best mechanical and physical

BAGDYK'YANTS, G.O.; KRUPYSHEVA, L.S.

Electron microscope studies of cellulose ester fibers in ultrathin sections. Zav.lab. 28 no.11:1351 '62. (MIRA 15:11)
(Cellulose esters) (Electron microscopy)

S/079/60/030/011/020/026
B001/B055

AUTHORS: Gorin, Yu. A., Svetozarova, V. M., Gorn, I. K., and Krupysheva, T. A.

TITLE: Investigation on the Catalytic Hydration of Acetylene and Its Derivatives in the Gas Phase. VII. Study on Copper-phosphate/Calcium-phosphate Catalysts

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 11, pp. 3817-3822

TEXT: Basing on the publications Refs. 1-8, the authors of the present work studied the action of copper phosphate and various other copper salts as agents for bringing about the hydration of acetylene. Calcium phosphate was used as second component, since Ref. 9 mentions the greater stability of catalysts prepared with this carrier. The authors tested the copper phosphate catalyst, and its mixtures with calcium phosphate. Calcium phosphate, which is inactive itself, is activated by addition of 0.01% copper phosphate, this activation increasing with higher percentages of copper phosphate up to a maximum at 0.3%. Higher percentages reduce the

Investigation on the Catalytic Hydration of Acetylene and Its Derivatives in the Gas Phase. VII. Study on Copper-phosphate/ Calcium-phosphate Catalysts

S/079/60/030/011/020/026
B001/B055

activity. The authors were interested to find out how a variation in calcium-phosphate composition would affect the copper-phosphate/calcium-phosphate catalyst. Several catalysts were prepared which contained 0.1% copper phosphate applied to mixtures of secondary- and tertiary calcium phosphate of various compositions. It was shown that the application of 0.1 - 0.3% copper phosphate onto calcium phosphate leads to highly active and selective catalysts for the hydration of acetylene. It was found that the activity of the copper-phosphate/calcium-phosphate catalyst depends on its content of neutral and acid calcium phosphates. Catalysts of a composition approaching neutral tertiary phosphate have the highest activity. Addition of 0.1 - 0.3% of other copper (II) salts to the calcium phosphate has about the same effect as addition of the same amount of copper phosphate. The activity of catalysts prepared with metallic copper and copper (I) chloride is low. By applying the copper-phosphate/calcium-phosphate catalyst, prepared in the required manner, the hydration process of acetylene can be carried out in a 100 h working cycle at an average catalyst working life of 600 h. There are 1 table and 14 references:

Card 2/3

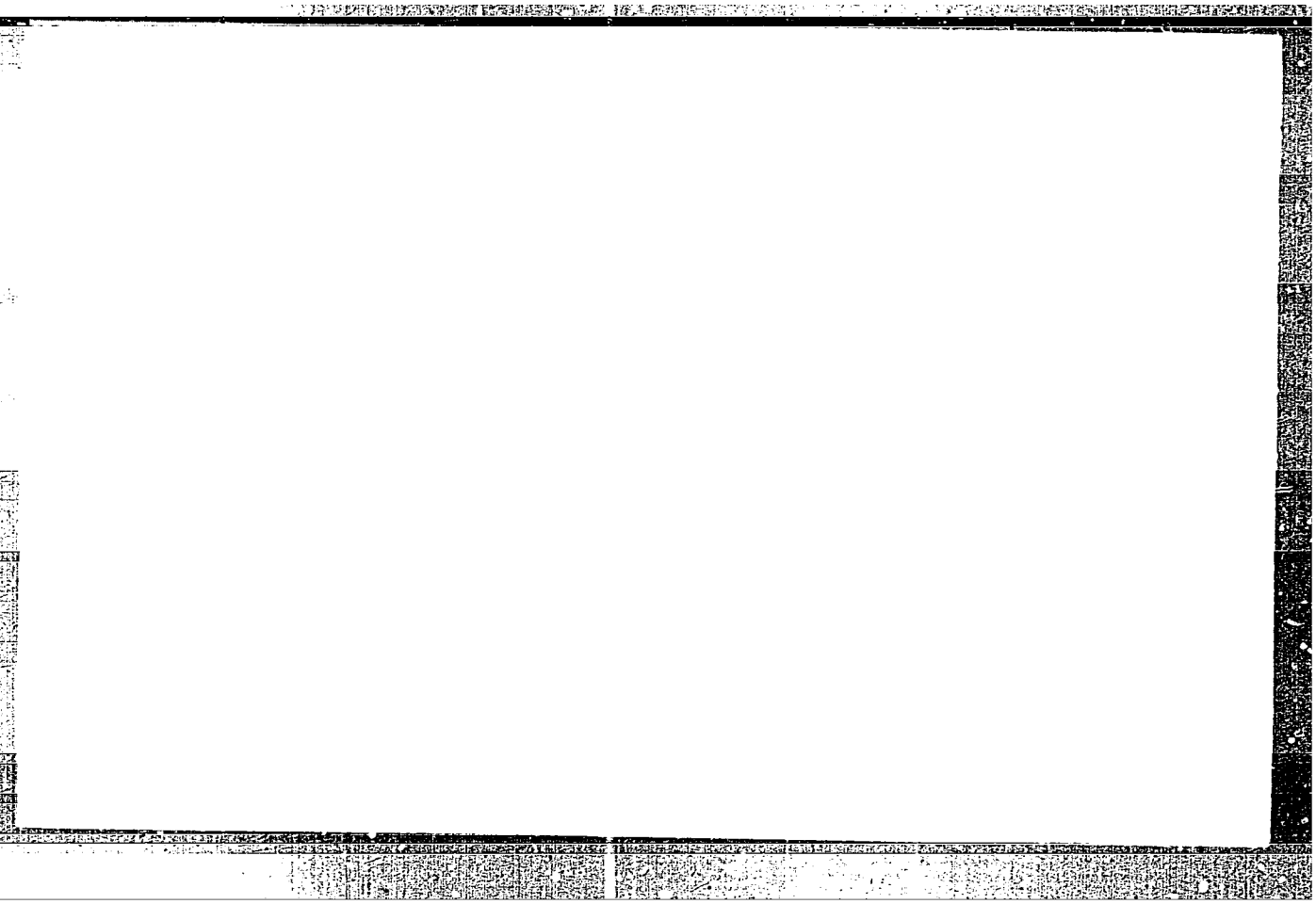
Investigation on the Catalytic Hydration of Acetylene and Its Derivatives in the Gas Phase. VII. Study on Copper-phosphate/ Calcium-phosphate Catalysts

S/079/60/030/011/020/026
B001/B055

11 Soviet, 2 US, 1 French, and 1 German.

SUBMITTED: October 24, 1959

Card 3/3



APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000826810007-9"

IVANOVA, L.V., PLUS, G.I.

Strength, adhesion and deformation characteristics of perchlorovinyl coatings. Lakokras.mat. i ikh prim. no.2:30-32 '64. (MIRA 17:4)

KRUS, S.

The noncellular forms of life, according to Lepeszynska and Gravits. Polski tygod. lek. 7 no. 11-12:325-327 24 Mar 1952. (CLML 22:4)

1. f the Institute of Pathological Anatomy of Warsaw Medical Academy.

KRUS, S.

Noncellular forms of life, according to Lepeszynska and Grawits.
Polski tygod. lek. 7 no. 13:367-371;concl. 31 Mar 1952. (CLML 22:4)

ZAHORSKA, A.;BERGER, S.;KRUS, S.

Modified value of vitamin A in experimental diseases of the liver. Polski tygod. lek. 8 no.37-39:1365-1366 28 Sept 1953. (CLML 25:4)

1. Of the Gastrological Clinic (Head--Prof. L. Plocker, M.D.) and of the Institute of Pathological Anatomy (Head--Prof. L. Paszkiewicz, M.D.) Warsaw Medical Academy and of the Division of Hygiene of Nutrition (Head--Prof. A. Szczygiel, M.D.) of State Institute of Hygiene.

KRUS, Stefan

General pathology of inflammation. Polski tygod. lek. 9 no.32:1017-1019; contd. 9 Aug 54.

1. Z Zakladu Anatomii Patolog. Ak. Med. w Warszawie; kierownik: prof. dr med. L.Paszkiewicz.
(INFLAMMATION, pathology,)

KRUS, Stefan

General pathology of inflammation, Polski tygod. lek. 9 no.33:1052-1054; contd. 16 Aug 54.

1. Z Zakladu Anatomii Patologicznej Akademii Medycznej w Warszawie; kierownik prof. dr med. Ludwik Paszkiewicz.
(INFLAMMATION, pathology.)

KRUS, Stefan

General pathology of inflammation. Polski tygod. lek. 9 no.34: 1077-1084; concl. 23 Aug 54.

1. Z Zakladu Anatomii Patologicznej Akademii Medycznej w Warszawie; kierownik: prof. dr L.Paszkiewicz.
(INFLAMMATION, pathology,)

ZAHORSKA, Alina; BERGNER, Stanislaw; KRUS, Stefan

Studies on vitamin A in liver diseases. I. Diagnostic and prognostic values of vitamin A in the blood. Polski tygod. lek. 10 no.3:75-80 17 Jan 55

1. Z Kliniki Gastrolicznej Akademii Medycznej w Warszawie, Kierownik: prof. dr med. L.Plocker, z Dzialu Higieny Zywienia Panstwowego Zakladu Higieny w Warszawie, kierownik: prof. dr med. A.Szczygiel i z Zakladu Anatomii Patologicznej Akademii Medycznej w Warszawie, kierownik: prof. dr med. Paszkiewicz.

(BLOOD,
vitamin A in liver dis., diag. & progn. values)
(VITAMIN A, in blood,
in liver dis., diag. & progn. values)
(LIVER, diseases,
blood vitamin A in, diag. & progn. values)

ZAHORSKA, Alina; EHRGER, Stanislaw; KRUS, Stefan

Studies on vitamin A in liver diseases. II. Relation of vitamin A in the liver to its experimental ethyl alcohol lesions. Polski tygod. lek. 10 no.4:99-105 24 Jan 55.

1. Z Kliniki Gastrologicznej Akademii Medycznej w Warszawie; kierownik: prof. dr med. L.Plocker; z Dzialu Higieny Zywienia Panstwowego zakladu Higieny w Warszawie; kierownik: prof. dr med. A.Szczygiel; z Zakladu Anatomii Patologicznej Akademii Medycznej w Warszawie; kierownik: prof. dr L.Paszkiewicz.

(VITAMIN A, metabolism,
liver, eff. of prolonged ethyl alcohol admin. in rats)
(LIVER, metabolism,
vitamin A, eff. of prolonged ethyl alcohol admin. in rats)
(ALCOHOL, ETHYL, effects,
on liver vitamin A in rats)

KRUS, Stefan

Role of the endocrine system in pathogenesis of tuberculosis with special reference to the adreno-pituitary system. Polski tygod. lek. 11 no.42:1805-1810 15 Oct 56.

1. Z Zakladu Patomorfologii P.A.N. kierownik prof. dr. nauk. med. Ludwik Paszkiewicz. Warszawa 1, ul. Chalubinskiego 5, Zaklad Patomorfologii PAN.

(TUBERCULOSIS, etiology and pathogenesis, adreno-pituitary factor, review (Pol))
(ADRENAL CORTEX, in various diseases, tuberc., pathogen. role of adreno-pituitary system, review (Pol))
(PITUITARY GLAND, ANTERIOR, in various diseases, same)

ZAGORA, Edward; KRUS, Stefan

Observations on a case of cyst of Krause's gland. Polski tygod. lek. 13 no.12:442-444 14 Mar 56.

1. V Polska Ekipa Lekarzy Specjalistow w Korei; kierownik: Jan Jaworski Konsultant Kliniki Okulistycznej Akademii Medycznej w Ham hynie; Edward Zagora konsultant Zakladu Anatomii Patologicznej Akademii Medycznej w Hamhynie: Stefan Krus.

(CONJUNCTIVA, cysts
of Krause's gland (Pol))

KRUS, Stefan.;NALEWAJKO, Lidia.

Bilateral symmetric necrosis of the renal cortex. Polski tygod. lek. 12 no.16:592-597 15 Apr '57.

1. (Z Zakladu Anatomii Patologicznej Akademii Medycznej w Warszawie; kierownik: prof. dr med. Ludwik Paszkiewicz; z II Kliniki Chorob Wewnetrznych Akademii Medycznejw Warszawie; kierownik: Prof. dr med. Dymitr Aleksandrow).Warszawa 1, ul. Chalubinskiego 5, Zaklad Anatomii Patologicznej.

(KIDNEY DISEASES
Necrosis of cortex, bilateral symmetric (Pol))

KRUS, S.: JAMPOLER, L.

Experimental necrosis of the liver in rats based on food deficiency. P 293

ROCZNIKI (Panstwowy Zaklad Higieny) Warsaw/ POLAND Vol. 9, no. 3, 1958

Monthly List of East European Accessions (EEAI) LC. Vol. 8, no. 7, 1959 (July)

Uncl.

KRUS, Stefan

Analysis and comparison of autopsy cases in Poland and in Korea during 1956-57. Polski tygod. lek. 14 no.49:2150-2154 7 Dec 59.

1. (Z Zakladu Anatomii Patologicznej A. M. w Warszawie; kierownik: prof. dr n. med. Ludwik Paszkiewcz: z Prosektury Szpitala Miejskiego Nr 4 w Warszawie; kierownik: prof. dr med. Janina Dabrowska; z V Polskiej Ekipy Lekarzy Specjalistow w Korei; kierownik Ekipy: dr med. Jan Jaworski, konsultant anatomopatolog: lek.Stefan Krus).
(AUTOPSY, statist.)

KRUS, Stefan, adiunkt

Effect of sex and sex hormones on the appearance of liver necrosis in nutritional deficiency in rats. Rozpr.wydz.nauk med. 5 no.2:207-231 '60.

1. Z Zakladu Patologii Doswiadczalnej Polskiej Akademii Nauk w Warszawie Kierownik: prof. dr n. med. Ludwik Paszkiewicz oraz z Zakladu Anatomii Patologicznej Akademii Medycznej w Warszawie Kierownik: prof. dr med. Janina Dabrowska (Przedstawili: prof. dr med. Aleksander Szczygiel, prof. dr med. Julian Walawski)

(LIVER physiol) (SEX HORMONES pharmacol)
(SEX CHARACTERISTICS) (DEFICIENCY DISEASES exper)

KRUS ,Stefan

Histopathological picture and development of tuberculous changes of the liver in guinea pigs. Pat polska 11 no.1:29-42'60.

1. Z Zakladu Patomorfologii PAN, Kierownik: prof. dr nauk med. Ludwik Paszkiewicz, Kierownik Pracowni Morfologicznej: doc. dr med. Zygmunt Rusiecewski.
(TUBERCULOSIS HEPATIC exper.)

BANKOWSKI, Zbigniew; BICZOWA, Barbara; GORSKI, Michal; KRUS, Stefan; LEWICKI, Zdzislaw; RUSZCZEWSKI, Zygmunt; STARZYNSKI, Stefan

Behavior of glycogen, fats and nucleic acids in the rat liver in acute radiation sickness. Pat. pol. 13 no.3:325-336 '62.

1. Z Pracowni Patomorfologii Zakladu Patologii Doswiadczalnej PAN w Warszawie. Kierownik: prof. dr med. L. Paszkiewicz. Kierownik pracowni: doc. dr med. Z. Ruszczewski.
(RADIATION INJURY EXPERIMENTAL) (LIVER GLYCOGEN)
(LIVER) (NUCLEIC ACIDS) (LIPID METABOLISM)

KARWOWSKA-STAUBER, Ludwika; TATON, Jan; KRUS, Stefan

Pyelonephritis in diabetes. Clinical and anatomo-pathological analysis during the period 1951-1961. Pol. arch. med. wewn. 33 no.4:421-432 '63.

1. Z III Kliniki Chorob Wewnetrznych AM w Warszawie. Kierownik: prof. dr med. E. Kodejszko i z Zakladu Anatomii Patologicznej AM w Warszawie Kierownik: prof. dr med. J. Dabrowska.
(PYELONEPHRITIS) (DIABETES MELLITUS)
(STATISTICS) (PATHOLOGY)